



The Case of the Vanished Dragon Keeper

Grade 5 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 5-6

Detective: _____ Date: _____

At dawn the great horn sounded over Emberhold: the Dragon Keeper was gone, snatched right off the watch tower. Scorch marks, loose scales, and a half-frozen lock were the only signs left behind. The castle's young scribe grabbed a quill and a notebook, because the only way to track this Rogue Dragon was to do the math.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the Rogue Dragon is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	BREATH WEAPON	HIDDEN SKILL	HEAD SHAPE	SCALE COLOR	WEAKNESS
Stormtail	Frost	Sky Soaring	Horned	Sapphire	Dragon Riddle
Frostfang	Fire	Tunnel Digging	Crested	Emerald	Salt Circle
Cinderclaw	Frost	Tail Whipping	Crested	Emerald	Silver Bell
Nightglide	Shadow	Vanishing	Crested	Emerald	Salt Circle
Voltaris	Stone	Sky Soaring	Horned	Sapphire	Silver Bell
Boulderback	Shadow	Water Diving	Crested	Sapphire	Salt Circle
Gildwing	Fire	Tail Whipping	Crested	Emerald	Dragon Riddle
Pyrelle	Fire	Water Diving	Crested	Emerald	Silver Bell
Glacieron	Frost	Water Diving	Crested	Emerald	Salt Circle
Tindra	Shadow	Tunnel Digging	Crested	Sapphire	Silver Bell
Brimstone	Fire	Vanishing	Horned	Crimson	Salt Circle
Hollowroar	Lightning	Water Diving	Crested	Emerald	Salt Circle
Thornscale	Stone	Tunnel Digging	Crested	Emerald	Salt Circle
Ironbrook	Shadow	Tunnel Digging	Horned	Crimson	Dragon Riddle
Saltspine	Shadow	Tunnel Digging	Horned	Sapphire	Salt Circle
Wyndra	Shadow	Water Diving	Horned	Sapphire	Salt Circle
Coralfin	Frost	Sky Soaring	Crested	Crimson	Salt Circle
Duskmaw	Lightning	Tunnel Digging	Horned	Emerald	Dragon Riddle
Ashwing	Shadow	Tail Whipping	Horned	Sapphire	Dragon Riddle
Quillscale	Lightning	Water Diving	Horned	Emerald	Salt Circle
Verdamaw	Fire	Sky Soaring	Crested	Crimson	Silver Bell

CLUE 1

The castle's scrying mirror tracks dragons, but it only shows their wingspan rounded to the nearest ten feet. Round the reading to learn which trick this dragon could never pull off.

Solve each problem, then write its letter in every clue box that shows the same number.

Diagram illustrating the distribution of 200,000 items across 100 bins. The top row shows 100 bins with values: 20000, 140000, 1400000, 4700000, 2800, 200000, 200000, 700000, 2800, 28000, 7000, 700000, 28000, 28000, 20, 20000. The bottom row shows 6 bins with values: 4700000, 700000, 28000, 2800, 700, 140000. The first and last bins in the top row are highlighted with a red 'T'.

Round 20,392 to the nearest ten thousand $\rightarrow$ **T**

Round 135,399 to the nearest ten thousand $\rightarrow$ **H**

Round 2,753 to the nearest hundred $\rightarrow$

Round 693 to the nearest hundred $\rightarrow$ **S**

Round 27,934 to the nearest thousand $\rightarrow$ **N**

Round 6,512 to the nearest thousand $\rightarrow$ **C**

Round 244,801 to the nearest hundred thousand $\rightarrow$ **L**

Round 4,650,827 to the nearest hundred thousand $\rightarrow$ **V**

Round 20 to the nearest ten $\rightarrow$ **0**

Round 1,401,411 to the nearest hundred thousand $\rightarrow$ **E**

Round 711,351 to the nearest hundred thousand $\rightarrow$ **A**

Scratch space:

CLUE 2 Addition

On the tower the scribe counts scorch marks in two clusters and adds them together to figure out if the witness who saw the head shape was telling the truth.

Solve each problem, then write its letter in every clue box that shows the same number.

A										A		A				
9690	3040	9660	6053	9812	5600	5878	5878	5878	9690	3040	9690	6053	9690	7561	7561	
		A														
5386	5600	9690	6053	6060	5600	5082	3645	3948	5082	5600	5878	6053				

5060 + 4630 = → A	6125 + 3535 = → I	1338 + 1702 = → W
1825 + 2123 = → C	6136 + 3676 = → N	1956 + 1689 = → Y
2384 + 2698 = → R	1981 + 4072 = → T	1845 + 4033 = → S
1968 + 3418 = → F	3437 + 4124 = → L	3226 + 2834 = → H
2408 + 3192 = → E		

Scratch space:

CLUE 3

Subtraction

Some watch lanterns were smashed in the attack. Subtract the broken ones from the full set to discover which weakness drove the dragon back.

Solve each problem, then write its letter in every clue box that shows the same number.

A		A									A		A		
1257	7303	1257	1753	1778	6991	3726	4598	3370	6350	1778	1257	1168	1257	6977	1839
5759	1753	3370	5759	6977	6350	1839	3726	1168	1839	3726	6991	1753	1839		

$4456 - 3199 = \square \rightarrow \text{A}$

$8259 - 2500 = \square \rightarrow \text{C}$

$7028 - 51 = \square \rightarrow \text{L}$

$2213 - 1045 = \square \rightarrow \text{S}$

$7819 - 1469 = \square \rightarrow \text{E}$

$4491 - 2652 = \square \rightarrow \text{T}$

$6143 - 2417 = \square \rightarrow \text{O}$

$1974 - 196 = \square \rightarrow \text{D}$

$6906 - 3536 = \square \rightarrow \text{R}$

$6593 - 4840 = \square \rightarrow \text{I}$

$9555 - 2564 = \square \rightarrow \text{P}$

$8279 - 976 = \square \rightarrow \text{M}$

$7793 - 3195 = \square \rightarrow \text{U}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

The roost holds neat rows of cracked eggshells, the same number in each row. Multiply the rows by the count in each to match the scale found at the scene.

Solve each problem, then write its letter in every clue box that shows the same number.

A					A					A								
50	132	18	121	18	108	50	4	25	54	22	50	4	18	54	96	90	22	44
						A												
96	27	96	84	18	16	50	4	4										

$10 \times 5 = \square \rightarrow \boxed{\text{A}}$

$7 \times 12 = \square \rightarrow \boxed{\text{H}}$

$10 \times 9 = \square \rightarrow \boxed{\text{U}}$

$5 \times 5 = \square \rightarrow \boxed{\text{D}}$

$12 \times 8 = \square \rightarrow \boxed{\text{T}}$

$11 \times 4 = \square \rightarrow \boxed{\text{K}}$

$2 \times 9 = \square \rightarrow \boxed{\text{E}}$

$9 \times 12 = \square \rightarrow \boxed{\text{R}}$

$11 \times 11 = \square \rightarrow \boxed{\text{M}}$

$4 \times 1 = \square \rightarrow \boxed{\text{L}}$

$2 \times 11 = \square \rightarrow \boxed{\text{C}}$

$8 \times 2 = \square \rightarrow \boxed{\text{W}}$

$12 \times 11 = \square \rightarrow \boxed{\text{N}}$

$9 \times 6 = \square \rightarrow \boxed{\text{S}}$

$3 \times 9 = \square \rightarrow \boxed{\text{O}}$

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

Three scouts must split the recovered claw prints evenly between them. Divide the prints to name the very last clue and corner the Rogue Dragon.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

$9 \div 9 = \boxed{}$

$24 \div 3 = \boxed{}$

$8 \div 4 = \boxed{}$

$32 \div 8 = \boxed{}$

$5 \div 1 = \boxed{}$

$60 \div 10 = \boxed{}$

$24 \div 8 = \boxed{}$

$33 \div 3 = \boxed{}$

$60 \div 6 = \boxed{}$

$60 \div 5 = \boxed{}$

$63 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain crumbles the stone walls, then burrows under the moat.
2. The villain scorches the castle gates, then burrows under the moat.
3. The villain scorches the castle gates, then fades clean out of sight.
4. The villain snuffs out every torch, then lashes the doors with its tail.
5. The villain crumbles the stone walls, then dives deep into the lake.
6. The villain blasts the watch towers, then burrows under the moat.
7. The villain snuffs out every torch, then burrows under the moat.
8. The villain freezes the heavy locks, then dives deep into the lake.
9. The villain blasts the watch towers, then dives deep into the lake.
10. The villain crumbles the stone walls, then swoops down from the clouds.
11. The villain freezes the heavy locks, then burrows under the moat.
12. The villain freezes the heavy locks, then fades clean out of sight.

Answer Key

The Case of the Vanished Dragon Keeper

Culprit: Hollowroar

Lightning · Water Diving · Crested · Emerald · Salt Circle

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN CANNOT VANISH"

Round 20,392 to the nearest ten thousand = 20000 (T) · Round 135,399 to the nearest ten thousand = 140000 (H) · Round 2,753 to the nearest hundred = 2800 (I) · Round 693 to the nearest hundred = 700 (S) · Round 27,934 to the nearest thousand = 28000 (N) · Round 6,512 to the nearest thousand = 7000 (C) · Round 244,801 to the nearest hundred thousand = 200000 (L) · Round 4,650,827 to the nearest hundred thousand = 4700000 (V) · Round 20 to the nearest ten = 20 (O) · Round 1,401,411 to the nearest hundred thousand = 1400000 (E) · Round 711,351 to the nearest hundred thousand = 700000 (A)

Clue 2 (Addition): "A WITNESS SAW A TALL FEATHERY CREST"

$5060 + 4630 = 9690$ (A) · $6125 + 3535 = 9660$ (I) · $1338 + 1702 = 3040$ (W) · $1825 + 2123 = 3948$ (C) · $6136 + 3676 = 9812$ (N) · $1956 + 1689 = 3645$ (Y) · $2384 + 2698 = 5082$ (R) · $1981 + 4072 = 6053$ (T) · $1845 + 4033 = 5878$ (S) · $1968 + 3418 = 5386$ (F) · $3437 + 4124 = 7561$ (L) · $3226 + 2834 = 6060$ (H) · $2408 + 3192 = 5600$ (E)

Clue 3 (Subtraction): "A MAID POURED A SALT CIRCLE TO STOP IT"

$4456 - 3199 = 1257$ (A) · $8259 - 2500 = 5759$ (C) · $7028 - 51 = 6977$ (L) · $2213 - 1045 = 1168$ (S) · $7819 - 1469 = 6350$ (E) · $4491 - 2652 = 1839$ (T) · $6143 - 2417 = 3726$ (O) · $1974 - 196 = 1778$ (D) · $6906 - 3536 = 3370$ (R) · $6593 - 4840 = 1753$ (I) · $9555 - 2564 = 6991$ (P) · $8279 - 976 = 7303$ (M) · $7793 - 3195 = 4598$ (U)

Clue 4 (Multiplication facts (1-12)): "AN EMERALD SCALE STUCK TO THE WALL"

$10 \times 5 = 50$ (A) · $7 \times 12 = 84$ (H) · $10 \times 9 = 90$ (U) · $5 \times 5 = 25$ (D) · $12 \times 8 = 96$ (T) · $11 \times 4 = 44$ (K) · $2 \times 9 = 18$ (E) · $9 \times 12 = 108$ (R) · $11 \times 11 = 121$ (M) · $4 \times 1 = 4$ (L) · $2 \times 11 = 22$ (C) · $8 \times 2 = 16$ (W) · $12 \times 11 = 132$ (N) · $9 \times 6 = 54$ (S) · $3 \times 9 = 27$ (O)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Hollowroar

$9 \div 9 = 1$ · $24 \div 3 = 8$ · $8 \div 4 = 2$ · $32 \div 8 = 4$ · $5 \div 1 = 5$ · $60 \div 10 = 6$ · $24 \div 8 = 3$ · $33 \div 3 = 11$ · $60 \div 6 = 10$ · $60 \div 5 = 12$ · $63 \div 9 = 7$